UJIAN TENGAH SEMESTER GASAL TH 2010/2011
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM
PROGRAM STUDI FISIKA

Matakuliah : **Elektronika Dasar**
Hari/ Tanggal : **Rabu, 27 Okt. 2009**
Waktu : **90 menit**

Kode : **MFS 2516**
Sifat : **Buku Terbuka**
Dosen : **Drs. Masiran, M.Si**

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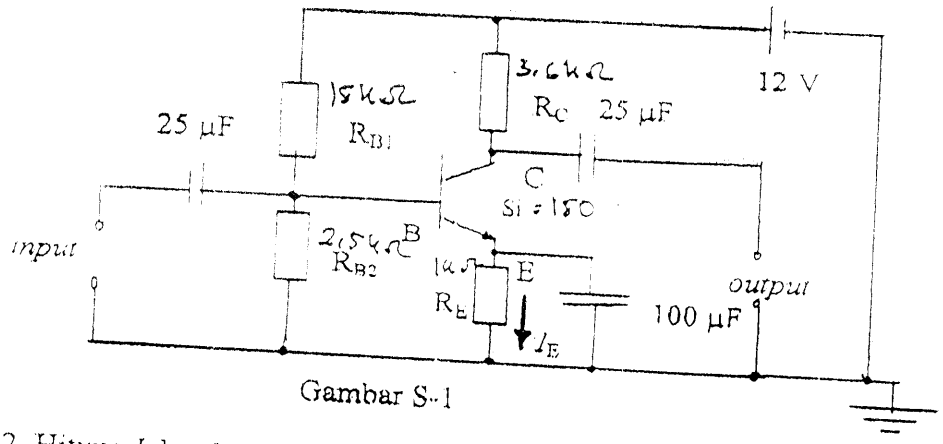
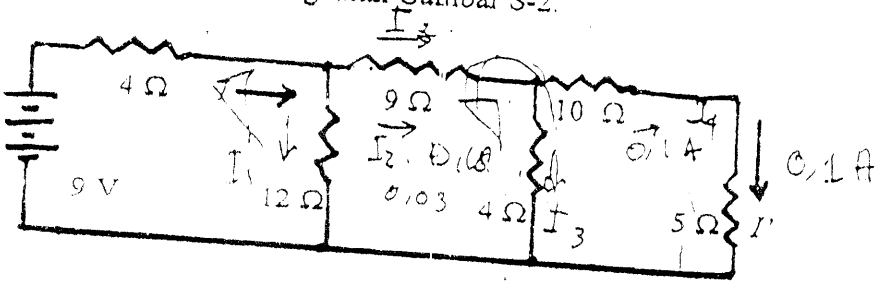
1. Dari rangkaian Gambar S-1 diketahui $R_C = 3{,}6\ k\Omega$; $R_E = 1\ k\Omega$; $R_{B1} = 15\ k\Omega$; $R_{B2} = 2{,}5\ k\Omega$ Transistor silikon, $\beta = 150$. Hitung I_E, V_C dan V_{CE}.



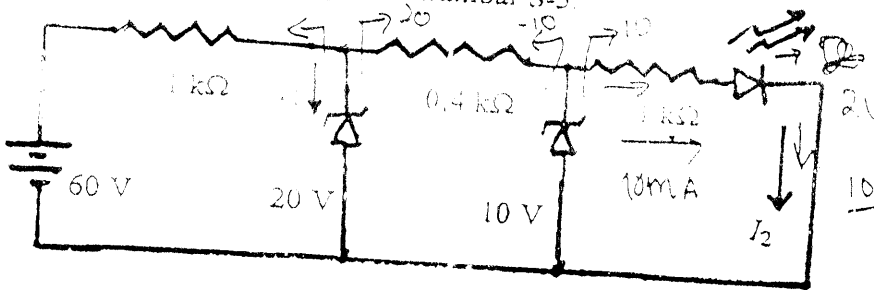
Gambar S-1

2. Hitung I dan I' rangkaian Gambar S-2.



Gambar S-2.

3. Hitung I_1 dan I_2 rangkaian Gambar S-3.



Gambar S-3

L.N.P

$I = I_1 + I_2$

$10V + 1k\Omega$

$I_3 = \frac{9\Omega}{9\Omega + 9\Omega} \cdot 0{,}1\,A$

$= \frac{9\Omega}{18\Omega} \cdot 0{,}1\,A$

$= 0{,}06\,A$

$I_2 = \frac{4\Omega}{17\Omega} \cdot 0{,}1\,A$

$= 0{,}03\,A$

$I_2 = 0{,}03\,A = \frac{I \cdot 4\Omega}{16\Omega} \cdot 0{,}03A$

$= 715\,mA$